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Amendments to the Claims:

This listing of claims replaces all prior versions, and listings, of claims in this application.

Listing of Claims:

- 1. 1-22. (Canceled)
- 23. (Presently Amended) A detection system for detecting intrusive behavior in a session on a computer <u>during an application monitoring phase</u>, said session comprising a plurality of applications invoked on said computer, and said computer having a computer operating system, said detection system comprising:
- (a) a plurality of <u>trained</u> neural networks, wherein each <u>trained</u> neural network <u>is has</u>

 <u>previously been</u> trained <u>during a training phase</u> to identify a pre-determined behavior pattern for a corresponding one of the plurality of applications, and wherein each trained neural network is <u>selected for use in the application monitoring phase based upon performance during a testing phase;</u>
- (b) a plurality of application profiles, wherein each application profile comprises a plurality of application data for a corresponding one of the plurality of applications, wherein said application data is collected during the session;
- (c) a temporal locality identifier, wherein when one of the plurality of application profiles is sequentially input to a corresponding one of the plurality of <u>trained</u> neural networks the <u>trained</u> neural network outputs a behavior indicator for each of the plurality of data strings in the application profile, and wherein if the behavior indicator meets a pre-determined criteria, a counter is incremented, and wherein if the counter has a high rate of increase the temporal

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locality identifier labels the application behavior intrusive, and wherein if a predetermined percentage of application behaviors are intrusive the session behavior is labeled intrusive.

- 24. (Original) The detection system of claim 23, wherein the pre-determined behavior pattern comprises a non-intrusive behavior.
- 25. (Previously Presented) The detection system of claim 23, the application data comprises a distance between a sequential mapping of system calls made by a corresponding one of the plurality of applications and a pre-defined string of system calls.
- 26. (Previously Presented) The detection system of claim 23, wherein the application data comprises a distance between a sequential mapping of object requests made by a corresponding one of the plurality of applications and a pre-defined string of object requests.
- 27. (Original) The detection system of claim 23, wherein the plurality of application profiles is created by a data pre-processor application.
- 28. (Original) The detection system of claim 27, wherein the data pre-processor receives input from an auditing system integral to the computer operating system.

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29. (Original) The detection system of claim 27, wherein the data pre-processor creates the plurality of second application profiles in real-time.

- 30. (Original) The detection system of claim 27, wherein the plurality of trained neural networks receive input from the plurality of application profiles in real-time.
 - 31. (Canceled)
 - 32. (Canceled)
- 33. (Presently Amended) The detection system of claim 23, wherein the plurality of trained neural networks comprises a plurality of backpropogation neural networks.
- 34. (Presently Amended) The detection system of claim 33, wherein each backpropagation neural network in the plurality of backpropagation neural networks comprises an input layer, a hidden layer and an output layer.
- 35. (Presently Amended) The detection system of claim 34, wherein a number of nodes in the hidden layer is determined by testing a plurality of cases for each <u>backpropogation</u> neural network in the plurality of backpropogation neural networks and selecting the <u>ease</u> wherein the <u>corresponding backpropogation</u> neural network <u>has having</u> a highest accuracy rate

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during the testing phase for use in application monitoring.

36. (Presently Amended) The detection system of claim 23, wherein the plurality of trained neural networks comprises a plurality of recurrent neural networks.

- 37. (Presently Amended) A method for detecting intrusive behavior in a session on a computer during an application monitoring phase, said session comprising a plurality of applications invoked on said computer, and said computer having a computer operating system, said method comprising the steps of:
- (a) training a plurality of neural networks <u>during a training phase</u>, wherein each neural network is trained to identify a pre-determined behavior pattern for a corresponding one of the plurality of applications;
- (b) creating a plurality of application profiles, wherein each application profile comprises a plurality of application data for a corresponding one of the plurality of applications, wherein said application data is collected during the session;
- (c) performing a temporal locality identifying algorithm, wherein when one of the plurality of application profiles is sequentially input to a corresponding one of the plurality of trained neural networks the trained neural network outputs a behavior indicator for each of the plurality of data strings in the application profile, and wherein if the behavior indicator meets a pre-determined criteria, a counter is incremented, and wherein if the counter has a high rate of increase the temporal locality identifier labels the application behavior intrusive, and wherein if a

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predetermined percentage of application behaviors are intrusive the session behavior is labeled intrusive.

- 38. (Original) The method of claim 37, wherein the pre-determined behavior pattern comprises a non-intrusive behavior.
- 39. (Previously Presented) The method of claim 37, wherein the application data comprises a distance between a sequential mapping of system calls made by a corresponding one of the plurality of applications and a pre-defined string of system calls.
- 40. (Previously Presented) The method of claim 37, wherein the application data comprises a distance between a sequential mapping of object requests made by a corresponding one of the plurality of applications and a pre-defined string of object requests.
- 41. (Original) The method of claim 37, wherein the plurality of application profiles is created by a data pre-processor application.
- 42. (Original) The method of claim 41, wherein the data pre-processor receives input from an auditing system integral to the computer operating system.

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43. (Original) The method of claim 41, wherein the data pre-processor creates the plurality of second application profiles in real-time.

- 44. (Original) The method of claim 41, wherein the plurality of trained neural networks receive input from the plurality of application profiles in real-time.
 - 45. (Canceled)
 - 46. (Canceled)
- 47. (Presently Amended) The method of claim 37, wherein the plurality of trained neural networks comprises a plurality of backpropagation neural networks.
- 48. (Presently Amended) The method of claim 37, wherein each <u>backpropogation</u> neural network in the plurality of backpropogation neural networks comprises an input layer, a hidden layer and an output layer.
- 49. (Presently Amended) The method of claim 48, wherein a number of nodes in the hidden layer is determined by testing a plurality of cases for each <u>backpropogation</u> neural network in the plurality of backpropogation neural networks and selecting the case wherein the

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corresponding neural network has a highest accuracy rate.

50. (Presently Amended) The method of claim 37, wherein the plurality of <u>trained</u> neural networks comprises a plurality of recurrent neural networks.